

Mercury Thermostat Collection and Performance Requirement

Department of Toxic Substances Control Reference Number: R-2010-3
Office of Administrative Law Notice File Number: Z-2012-0807-05

FINAL STATEMENT OF REASONS

UPDATE OF INITIAL STATEMENT OF REASONS

As authorized by Government Code **section 11346.9, subdivision (d)**, the Department of Toxic Substances Control (DTSC) incorporates by reference the Initial Statement of Reasons prepared for this rulemaking. Amendments and deletions made to the Initial Statement of Reasons were made to clarify statements made in the section titled Detailed Statement of Reasons, to amend the existing detailed statement of reasons as a result of public comments received during the 45-Day Public Notice and Comment Period, or to amend the detailed statement of reasons as a result of amended regulation text and public comments received during the 15-Day Public Notice and Comment Period of Post-Hearing Changes. These amendments are shown below as underline text (underline) for amendments and strikeout text (~~strikeout~~) for deletions.¹

DETAILED STATEMENT OF REASONS:

Amend Section 66274.2. Applicability

This proposed section is necessary to establish the effective date of the regulations and to specify the persons to whom the regulations apply: manufacturers, demolition contractors, and heating ventilation and air conditioning (HVAC) contractors. This section has been amended to change the effective date of the regulations to July 1, 2013, since the original effective date of January 1, 2013, has already passed. This change was intended to be included in the proposed regulations presented in the 15-day notice, but due to a typographical error the change was inadvertently omitted. This change is added to the final regulations text as a non-substantive change since the change was made elsewhere in the proposed regulations presented in the 15-day notice and it is clearly necessary since an effective date that has already passed does not make sense.

Amend Subsection 66274.4 (a)

This subsection describes the methodology for determining the number of out-of-service mercury-added thermostats becoming waste in each calendar year. The methodology is based on a 2009 study conducted by Skumatz Economic Research Associates (SERA) for the Thermostat Recycling Corporation (listed above in "Reports Relied On." SERA surveyed businesses and households across California, using purchased third-party lists of randomly selected lists of names and addresses. The survey questions were designed to obtain a variety of information, including (but not limited to):

- The number of thermostats in the responding business or household;
- The number of the thermostats that contain mercury;

¹ For purposes of this Final Statement of Reasons, all regulatory references are to the Cal. Code Regs., tit. 22, div. 4.5, unless otherwise specified. All abbreviations and acronyms are provided in the Initial Statement of Reasons, incorporated by reference herein.

- The age of the building, date of installation of the thermostat(s), etc.
- Dates thermostats were removed in the past;
- Demographic/"firm-o-graphic" data on the household or business, Etc.

SERA analyzed and validated the data. They found that building age, remodel age, and gross square footage were most closely correlated with the number of thermostats in place. The survey provided SERA with data on the ages at which thermostats were removed in the past, whether because they failed or for some other reason. SERA used "... the lifetimes of [mercury-added thermostats] that have already been removed and the age of those still in place to predict how long the remaining equipment will last...." SERA then "... multiplied the inventory or 'count' of thermostat equipment still in place [by] the annual flow rates from this model to compute the actual number expected to be removed each year from the residential vs. the commercial sectors."

To develop the estimated numbers of thermostats becoming waste in each calendar year, SERA used a statistical "cumulative distribution and expected lifetime model, along with survey data on the distribution of ages of installed thermostats." Digital thermostats and thermostats installed since California's ban on the sale of mercury-added thermostats were removed from the count of thermostat. SERA divided the remaining inventory of thermostats into age quartiles. "Using the [thermostat] lifetime/cumulative distribution curve, [SERA] started at the years of life already expended, and adjusted the annual disposal streams for each cohort to conform with..." the expectation that 100 percent of thermostats will have been replaced after about 70 years. SERA "... summed up the cohorts to develop the estimate of the total market that would flow out in a given year." These results are tabulated in Table 1.5 of the SERA provides three sets of estimates of the number of thermostats becoming waste each year:

- A low estimate, which is based on data from a small-scale validation study by SERA which found that 17 percent of square thermostats and 70 percent of round thermostats contain mercury;
- A middle estimate, which assumes that all square and round thermostats contain mercury (i.e., that does not take the results of the validation study into account; and
- A high estimate, which applies a 13.5 percent factor ("validation premium") to the middle estimate values, to account for the undercounting of thermostats by survey respondents seen in the validation study mentioned previously.

DTSC has determined that SERA's study was well-conducted and provided statistically valid data on the number of thermostats becoming waste annually. Therefore, DTSC is adopting the results of the study, as summarized in Table 1.5 of the SERA, as the methodology for these regulations. Due to the relatively small sample size in SERA's validation study and its geographical limitations (all site visits were in the San Francisco Bay area), DTSC has chosen to use SERA's low estimate, described above, in its methodology. While this conservative approach may underestimate the true number of out-of-service mercury-added thermostats becoming waste annually, DTSC has concluded that this approach is rigorous and defensible.

This subsection has been amended to include the table depicting the number of out-of-service mercury-added thermostats becoming waste annually. This table, originally located in subsection (b), was moved to subsection (a)(1) and the subsequent sections renumbered for clarity and to make the provision in this subsection easier to follow.

Subsection 66274.4 (b)

This subsection table specifies the number of out-of-service mercury-added thermostats becoming waste annually, determined according to the methodology specified in subsection (a), in tabular form. Column A specifies the calendar year, starting with 2013. Column B lists the “low estimate” for each year (taken from table 1.5 of the SERA report). Column B represents the estimate of total number out-of-service mercury-added thermostats becoming waste in each calendar year (TT), as calculated pursuant to subsection (a). This subsection was included for the convenience of the reader. It allows the reader access to the data from the SERA study and to determine the estimated number of out-of-service mercury-added thermostats becoming waste each year in one place.

Add Subsection 66274.4(a)(2)

This subsection describes the method that shall be used to determine the pro rata portion of total thermostats (TT) for the year 2013. This addition is necessary to accommodate the change in the effective date of the regulations to July 1, 2013, allowing the pro-rata portion of total thermostats (TT) for 2013 to be half of what the TT value would be if the effective date remained January 1, 2013.

Amend Subsection 66274.4(e) (b)

This subsection is included to make clear that DTSC will welcome submittals from thermostat manufacturers of updated data on the number of mercury thermostats in use in California and the number estimated to become waste each year. The subsection specifies that such data should include all raw data, formulas, assumptions, models, and calculations used in the manufacturers’ calculations. This specificity is necessary to ensure that DTSC has enough information to verify the manufacturers’ calculations and to support external scientific peer review, if required. Without the raw data, calculations, formulas, assumptions, ~~etc.~~ and models, DTSC would be unable to support a rulemaking to update the methodology in this section.

This subsection was amended to allow any person, not just manufacturers, to provide the department with a submission of updated data regarding the number of mercury-containing thermostats in use and/or likely to become waste each year. This amendment is needed because expanding the types of entities that can submit additional data increases the likelihood that additional data may be submitted and removes any potential bias that might be incurred if only manufacturers were allowed to submit additional or updated data.

The requirements for providing additional information remain the same, except the amendment now allows an option to provide to the department a proposed plan for obtaining additional data at least six months before submitting the actual data. This amendment, added in response to a comment, allows any person undertaking an estimation methodology to request review and comment from DTSC to improve the quality of the information provided. DTSC believes it will be in the interest of a manufacturer, group of manufacturers, or other stakeholders wishing to provide data to support an update of the methodology being adopted in this rulemaking to engage with DTSC early in the planning process. However, this provision is an option, not a requirement. This subsection was also renumbered for clarity.

Amend Subsection 66274.4(d) (c)

This subsection clarifies that the department will consider additional data and information provided by manufacturers to support possible future amendments to the methodology

established in subsections (a) and (b). The SERA study was the first of its kind to estimate the population of mercury-added thermostats in use in California (or anywhere, to DTSC's knowledge) and the rate at which these thermostats will be removed from service. Subsequent research may refine the estimates in the SERA report. Subsection (dc) is necessary to make clear that DTSC intends to review and consider any new information submitted by manufacturers and, if the data support it, to use the information as the basis for updating the methodology. This subsection and subsection (eb), which immediately precedes it, make clear that DTSC would need all raw data, formulas, calculations, models, and assumptions used in order to support amendments to the methodology for determining the total number of out-of-service mercury added thermostats (TT) becoming waste annually. This subsection was renumbered for clarity.

Amend Subsection 66274.5(a)

This subsection specifies the collection rate performance requirements (TP) that apply to a manufacturer or group of manufacturers operating a program for each calendar year, in tabular form. Column A specifies the calendar year, starting with 2013. Column B specifies the total number of mercury thermostats becoming waste in a given year (TT), (these numbers are taken directly from column B of the table in subsection (b) of that section). As required by paragraph (b)(1) of section 25214.8.17 of the Health and Safety Code, column C specifies the collection rate performance requirement for a given year (TP) as a percentage of the total number of out-of-service mercury-added thermostats becoming waste in that year. Column D specifies the calculated number of mercury added thermostats represented by the percentage specified in column C, determined by multiplying TT (column B) by TP (column C).

This subsection was amended by changing the numbering in the section to add subsection (a)(1), which was inadvertently omitted from the original text. In subsection (a)(2), the reference to section 66274.4 subsection (b) was changed to subsection (a) to be consistent with the renumbering in that section. In addition minor, non-substantive changes were made to correct grammar and consistency in citations throughout the chapter.

Amend Subsection 66274.5(b), paragraph (1)

This paragraph describes how the pro rata proportion of TT will be assigned to each manufacturer. Subsection (i) of section 25214.8.13 of the Health and Safety Code requires a manufacturer or group of manufacturers operating a collection program to submit an annual report to DTSC. Section 66274.8 of these proposed regulations specifies additional information that a manufacturer or group of manufacturers will be required to include in its annual report. One of these required data elements, which is specified in subsection (a), is a "listing of all brand names of mercury-added thermostats historically produced by the manufacturer or group of manufacturers and sold in California." In the event there is more than one collection program operating in a given year, DTSC will use information submitted pursuant to subsection (a) of section 66274.8 on the brands represented by each program and the information submitted pursuant to subsection (c) ("... the number of each brand name and manufacturer") to allocate each program's pro rata share of TT.

DTSC will determine the proportion of the total number of out-of-service mercury-added thermostats collected in a given year represented by each brand. The proportions of TT for all brands represented by a collection program will then be added, yielding the program's pro rata proportion of TT. For the purpose of assigning pro rata proportions of TT if multiple programs

were ever implemented, DTSC would not include in its calculations thermostats whose manufacturers:

- Cannot be identified,
- Are no longer operating, or
- Are not participating in the program.²

Example

- Assume there are two collection programs (Program 1 and Program 2) and five manufacturers (A, B, C, D, and E).
- Assume Program 1 represents manufacturers A, B, and E and Program 2 represents manufacturers C and D.
- Assume manufacturer A's thermostats represent 10 percent of the total number collected in that year, manufacturer B's represent 15 percent, manufacturer C's represent 25 percent, manufacturer D's represent 30 percent, and manufacturer E's represent 20 percent.

Program 1's pro rata share of TT would be determined as follows:

- 10% (manufacturer A's share) + 15% (manufacturer B's share) + 20% (manufacturer E's share) = 45% of TT.

Similarly, Program 2's pro rata share would be determined as follows:

- 25% (manufacturer C's share) + 30% (manufacturer D's share) = 55% of TT.

This paragraph is amended to correct a typographical error, changing the reference to subsection (a) of section 66274.7 to the correct reference to subsections (a) and (c) of section 66274.8. This amendment is necessary for accuracy, consistency and clarity of the regulation text.

Amend Subsection 66274.5(b), paragraph (2)

This paragraph is necessary to make clear that, in the event more than one manufacturer or group of manufacturers operates a thermostat collection and recycling program, each program's collection rate requirement is the same percentage specified in column C of section 66274.5, but each program is required to collect that percentage of its respective pro rata share of TT. This paragraph was amended to correct a typographical error, changing "the" to "each," to be consistent with the grammatical construct of the text and to clarify that the requirement applies to each program's collection rate goal.

²Pursuant to subsection (b)(1) of section 25214.8.12 of the Health and Safety Code, thermostats produced by a former manufacturer of mercury-added thermostats that does not participate in a program to collect out-of-service mercury-added thermostats may not be sold in California.

Amend Subsection 66274.5(b), paragraph (3)

This paragraph is necessary to make clear that DTSC will accept and consider additional data submitted by a manufacturer or group of manufacturers to support a change to the pro rata share of TT assigned to the program pursuant to paragraph (1), as described above. This paragraph is also necessary to specify the timeframe in which DTSC would be required to update one or more programs' pro rata share(s) of TT on its public website, posted pursuant to subsection (c) (discussed below). This paragraph was amended to correct grammatical errors and to clarify the information that the department shall post on its website. These amendments are necessary to correct grammar and improve consistency within the chapter and are not substantive in nature.

Amend Subsection 66274.5(c)

This subsection is necessary to provide details about the dates and specific information that DTSC would be required to post on its public website on or before May 1 of each year, beginning in 2013:

- The total number of out-of-service mercury-added thermostats becoming waste (TT) in the year covered by the report, beginning with 2013. If more than one manufacturer or group of manufacturers operated a program during the year, DTSC would post each program's pro rata share of TT.
- The total number of thermostats collected by each program during the year, determined pursuant to subsection (e) of proposed section ~~66274.4~~ 66274.8.
- A restatement of the program's collection rate performance requirement (TP) from subsection (a).
- The collection rate achieved by the program, expressed as a percentage of TT or the program's pro rata share of TT, as appropriate.
- A determination of whether the program met TP for the reporting year.

Website posting ensures all manufacturers, interested stakeholders, and the public have easy access to information about the performance of the manufacturers' program or programs. This subsection was amended to clarify that the information posted to the department's website regarding the total number of thermostats collected by the program is a number that is collected pursuant to the reporting requirements and not a figure that is determined by the department. This subsection also contains amendments to correct a typographical error in a reference citation, a reference citation that changed due to renumbering and the reference citation format. These changes are needed to clarify the requirement and correct minor, non-substantive citation errors.

Amend Section 66274.7

This section lays out requirements for ~~various persons~~ contractors, and their employees, who deliver out-of-service mercury-added thermostats to manufacturer-sponsored collection locations established pursuant to this law. ~~Contractors and others~~ who deliver thermostats would be required to provide basic, identifying information to the collection location at the time they drop off out-of-service mercury-added thermostats: their name, address, and telephone number. DTSC expects that the manufacturers will use this information to comply with the reporting requirements in proposed section 66274.8. As discussed below, obtaining this information in the manufacturers' annual report(s) will allow DTSC to monitor compliance with and, if necessary, enforce the requirements that HVAC contractors and demolition contractors

deliver out-of-service mercury-added thermostats to a manufacturer-sponsored collection location.

Contractors deliver most of the thermostats received at manufacturer collection locations. Because the Contractors State Licensing Board (CSLB) database contains detailed information including contact information about contractors, the regulations will allow contractors to provide their CSLB numbers to the collection location in lieu of more elaborate recordkeeping requirements. To further simplify this requirement, subsection (b)(2) would allow a contractor to simply write its CSLB number on the container in which the thermostats are delivered.

This section has been amended to remove the requirement that persons other than contractors provide a name, address and telephone number to the collection location upon delivery of thermostats. This amendment, made in response to comments, is needed because collecting non-contractor information can become cumbersome and provides limited compliance value. In addition, requiring identifying information from homeowners and persons electing to replace thermostats themselves may serve as a disincentive to delivering the thermostats to collection locations, potentially resulting in improper management of mercury-containing thermostats.

This section has also been amended to remove the reference in paragraph (b) to California Code of Regulations, title, 22, section 66273.35, which specifies time limits for accumulating universal waste, because this reference is not needed in this section. This section was also changed to clarify that the requirement in paragraph (b) refers specifically to “out-of-service mercury-added” thermostats, as described in paragraph (a). This section was also amended to correct grammatical errors and renumber the section for clarity and simplicity.

Amend Section 66274.8

Subsection (i) of section 25214.8.13 of the Health and Safety Code requires manufacturers operating a thermostat collection program, individually or collectively, to submit an annual report to DTSC summarizing the previous year’s activities. The statute identifies twelve required elements of the annual report. This proposed section would augment the statutory annual reporting requirements with additional, more specific information that would enable DTSC to do several things:

- To allocate pro rata proportions of TT in the event more than one collection program is operated by manufacturers or groups of manufacturers in a given year;
- To give manufacturers appropriate credit for loose ampoules that are brought to a collection location toward meeting their collection rate performance requirement;
- To better assess the performance of the program or programs and to inform discussions with the manufacturers in the event that DTSC determines it is necessary to order program revisions pursuant to section 25214.8.17 of the Health and Safety Code;
- To identify HVAC or demolition contractors not participating in the program for follow up; and
- To evaluate the effectiveness of the manufacturers’ program or programs in California with respect to programs operated in other states. This information could be used to modify collection rate performance requirements in a future rulemaking.

This section was amended to correct the format of the citation referenced in the section.

Amend Subsection 66274.8 (a)

This paragraph originally required a manufacturer or group of manufacturers to provide a listing of all brands of thermostats that the manufacturer or group operating the program historically

produced. This information would allow DTSC to allocate pro rata proportions of TT in the event more than one program is operated in a given year (see discussion of subsection (b) of section 66274.5(b), above). This paragraph was amended in response to comments to remove the listing of brand names of thermostats, since historical brand names may not be useful for identification purposes. The manufacturer information contained in this requirement is sufficient for identification and reporting purposes. A listing of manufacturers represented in each thermostat collection program will be needed in the event that more than one group of manufacturers were to establish separate collection programs; this information would be needed for DTSC to allocate the appropriate share of mercury thermostats becoming waste in that year to each program.

Amend Subsection 66274.8 (b)

Paragraphs (b)(1), (b)(2), and (b)(3), respectively, would require manufacturers to provide the name, physical address, and contact phone number of:

- The locations to which they have shipped thermostat collection bins;
- ~~The locations at which the bins were used to collect out-of-service mercury-added thermostats (which may be different³); and~~
- The locations from which bins were returned, and
- ~~The date or dates on which each bin was received.~~

~~Subparagraphs (b)(1)(B), (b)(2)(B), and (b)(3)(B) would also require the manufacturers to report the unique identification number of each collection bin.~~

This information is necessary to verify the compliance of HVAC wholesalers with subsection (a) of section 25214.8.14 of the Health and Safety Code, which requires a “wholesaler that has a physical location in the state [to] act as a collection location for out-of-service mercury-added thermostats.”

DTSC believes that compliance by wholesalers with this requirement is essential for a successful thermostat collection program. However, determining wholesaler compliance poses challenges. Locations that accept universal waste thermostats from off-site, including wholesalers that collect thermostats pursuant to this requirement, are not required to notify or submit reports to DTSC of their activities with respect to thermostats. DTSC originally thought that hHaving each bin's unique identification correlated with the location at which it was used to collect thermostats will would enable DTSC to assess compliance of HVAC wholesalers that do not necessarily receive their collection bins directly from the manufacturers. However, in response to comments, DTSC has amended these paragraphs to remove the reporting requirement for bin identification numbers and locations of bin usage, and references to the locations where bins are used. These changes are based on manufacturers' description of its data on collection locations as transitory; that bins may be moved or consolidated and that manufacturers no longer use unique bin identification numbers to track collection locations. DTSC recognizes manufacturers depend upon others, such as wholesale distributors, to provide collection location information, and the manufacturers know with some certainty only the locations to where bins are shipped and from where bins are received. DTSC has determined that the amendments still allow close tracking of collection locations. This information will ~~also~~ allow the manufacturers and DTSC to compare thermostat collections at different collection sites and identify potential targets for outreach, education and, if necessary, DTSC enforcement

³ In some cases, a large HVAC wholesaler with multiple business locations may request that the manufacturers ship collection bins to one location from which the bins are subsequently distributed to its other sites.

if overall collection rate performance requirements are not met. These amendments also correct minor grammatical errors and renumber these paragraphs for clarity and consistency.

Amend Subsection 66274.8(c)

This proposed section will require reporting of the total number of out-of-service mercury-added thermostats collected by a program in the previous calendar year, specifying the number of ~~from~~ each brand and manufacturer. Statute already requires reporting of the total number of thermostats that a program collects in a calendar year. This additional information by brand/manufacturer is necessary to determine the pro rata proportion of TT allocated to each manufacturer or group operating a program in the event more than one collection program operates during a given year. For specific information on how this data would be used, please refer to the statement of reasons for paragraph (1) of subsection 66274.5(b), above.

This subsection was amended in response to comments to remove the requirement to specify the number of thermostats collected by brand, since brand names are not necessarily a reliable method of identifying thermostats by manufacturer. However, to be complete, the reporting requirements must include thermostats that are no longer manufactured or for which the manufacturer cannot be determined. Paragraph (2) was added to require inclusion of such thermostats in the total counts. This amendment is needed to ensure the reported numbers of thermostats collected are as complete as possible. These amendments also correct minor grammatical errors and renumber these paragraphs for clarity and consistency.

Amend Subsection 66274.8 (d)

The Thermostat Recycling Corporation (TRC), which operates California's collection program on behalf of 30 former manufacturers of mercury thermostats, actively discourages contractors from removing the mercury switches (ampoules) from thermostats. TRC's official policy is not to accept loose ampoules, due to the increased risk of breakage once they are removed from the protective housing of a thermostat. However, given that containers of loose ampoules continue to be deposited in TRC's collection bins, DTSC believes that the manufacturers should receive credit for them toward attainment of their collection rate performance requirement(s). This subsection is necessary to clarify how loose mercury ampoules returned in thermostat collection bins should be counted toward the manufacturers' collection of thermostats. Paragraph (d)(1) requires reporting of the total number of loose ampoules returned during the reporting year. Paragraph (d)(2) specifies how the manufacturers should calculate the number of out-of-service mercury-added thermostats represented by these loose ampoules. Initially, manufacturers would receive credit for one thermostat for every two loose ampoules received. DTSC has based this factor on TRC's 2011 annual report, which reports that 18,697 intact thermostats were collected, containing 38,569 ampoules. This corresponds with 2.06 ampoules per thermostat.

Paragraphs (d)(2)(B) and (d)(3) ~~are~~ is needed to clarify that a manufacturer or group may use an alternate conversion factor to calculate the number of mercury thermostats represented by loose ampoules, provided the manufacturer or group provides data and calculations to support it. This subsection has been amended to renumber the requirements for clarity and make minor corrections to the citation format.

Amend Subsection 66274.8 (e)

This subsection is necessary to specify how a manufacturer or manufacturers operating a collection program should calculate the number of thermostats it has collected during the year covered by the annual report. The calculation is simple: the total number of thermostats collected would be the sum of the numbers of intact out-of-service mercury-added thermostats of all brands collected during the reporting year, determined pursuant to subsection (c) and the number of thermostats represented by loose ampoules collected during the reporting year, determined pursuant to subsection (d). This subsection has been amended to remove the reference to the thermostat brand name for consistency of the information in this chapter and to make minor corrections to the citation format.

Amend Subsection 66274.8 (f)

Subsection (f) would require the manufacturers to provide information on locations to which collection bins were shipped, but not returned, within 18 months. ~~The required elements include the location's name, address, contact person, telephone number, and the unique identification number(s) of the bin(s).~~ This information is necessary for two purposes: 1) it will help DTSC identify locations that have requested a collection bin but are not accepting thermostats as required by the law and 2) it will help identify locations that are accepting thermostats and accumulating them beyond the one year limit allowed under the universal waste regulations.

This subsection has been amended to provide a date of December 31 of the reporting year for determining the time frame for bins that were not returned. In addition, this subsection was amended in response to comments to remove the reference to bin identification numbers, since these are no longer used by manufacturers. Similarly, the listing of the types of locations that may receive bins and their addresses were also removed since this information is available elsewhere in the reporting requirements. These changes are needed to provide consistency of the information in this chapter and provide a definite period for reporting of the annual data.

Amend Subsection 66274.8 (g)

This subsection would require manufacturers to report the CSLB identification numbers of HVAC and demolition contractors that delivered thermostats to collection locations. Subsection (a) of section 66274.7 requires a contractor to provide this number to the collection location at the time they deliver out-of-service mercury-added thermostats (see above). By comparing the list of collection locations provided by the manufacturers with the CSLB's list of HVAC and demolition contractors, DTSC will be able to identify contractors that have not delivered out-of-service mercury-added thermostats to a collection location for follow up. The fact that a contractor did not deliver out-of-service mercury-added thermostats to a collection location may have a reasonable explanation and may not mean that the contractor is in violation of the law. For example, some HVAC contractors may specialize in certain types of HVAC equipment and may never encounter out-of-service mercury-added thermostats, while others may work exclusively on new construction. However, to ensure fairness and consistent enforcement among contractors, it is important that DTSC investigate anomalies and take action when appropriate.

This paragraph is amended to correct a typographical error, changing the reference to subsection (a) of section 66274.6 to the correct reference to subsection (a) of section 66274.7, and to make minor corrections to the citation format.

Amend Subsection 67388.8 (i)

Subsection (i) requires manufacturers to provide information about thermostat collection programs they operate in other states. There are ~~five~~ three required elements of this provision:

- Paragraph (i)(1) – The name of the state;
- Paragraph (i)(2) – The number of mercury thermostats collected during the calendar;
- Paragraph (i)(3) – ~~A brief description of the state's law, including any requirement for payment of an incentive~~
- ~~Paragraph (i)(4) – The number of collection locations in the state, if known.; and~~
- Paragraph (i)(5) – ~~A description of any education and outreach and performance requirements in the state's law.~~

This information will allow DTSC to evaluate the performance of the manufacturers' collection program in California in comparison with other states that have thermostat collection laws. DTSC can use it to determine whether and how to order a manufacturer or group of manufacturers to modify its program in the event its collection rate performance requirement is not met. Information about the results of thermostat collection programs in other states would also provide DTSC with baselines that may be helpful in evaluating the State's collection rate performance requirements and whether they should be modified in the future.

While some of the information in this subsection may be publicly available from the states with thermostat collection laws, the reporting requirement is nevertheless necessary to ensure that DTSC has the information in a timely fashion to evaluate the manufacturers' success in California and to meet the May 1 Web posting requirement specified in subsection (c) of section 66274.5. Other states with thermostat collection laws may have different reporting dates from California's and/or may not post the results on their public websites expeditiously. By including this information in the annual report, DTSC will have the information it needs to evaluate the manufacturers' performance.

This subsection was amended in response to comments to remove the requirement that the provision apply only to state-mandated programs. This amendment was necessary because manufacturers operating similar collection programs can provide collection information and activities in all states; not only those states where collection programs are mandated. This information will help to gauge participation and performance in other collection programs and may be used to determine if the performance goals in the proposed regulations remain achievable and to ensure California's program collects the maximum feasible number of out-of-service mercury-added thermostats in accordance with the statute. This subsection was also amended to remove the references to information about the laws and requirements of other states since the requirement is no longer limited to state-mandated programs.

LOCAL MANDATE DETERMINATION

DTSC has determined that adoption of these regulations will create no new local mandates.

Estimate of Potential Cost or Savings to Local Agencies Subject to Reimbursement:

Local agencies, acting as Certified Unified Program Agencies (CUPAs), are responsible for inspecting many of the businesses that generate hazardous waste, universal waste being a subset of hazardous waste. CUPAs are authorized by Health and Safety Code section 25404.3 to assess fees to cover the costs of these inspections and enforcement programs. DTSC has determined that the proposed regulations will not impose a local mandate or result in costs subject to reimbursement pursuant to part 7 of division 4, commencing with section 17500, of the Government Code or other nondiscretionary costs or savings to local agencies.

ALTERNATIVES DETERMINATION

DTSC has determined that no reasonable alternative it considered or that has otherwise been identified and brought to the attention of DTSC would be more effective in carrying out the purpose for which these regulations are proposed, or would be as effective and less burdensome to affected private persons than the proposed regulations, or would be more cost-effective to affected private persons and equally as effective in implementing the statutory policy or other provision of law.

Existing law requires manufacturers who sold mercury-added thermostats in California to establish a thermostat collection program, pay the costs of transporting and recycling mercury thermostats and conduct education and outreach. The statute provides free recycling of out-of-service mercury-added thermostats to private persons by manufacturers. The proposed regulations establish the performance standards for the manufacturers' collection program and do not specify requirements detailing how manufacturers shall accomplish the performance standards.

DTSC considered, and a commenter suggested, establishing contractor reporting requirements to estimate the number of thermostat considered waste annually. DTSC rejected this option because it places the primary burden for compliance on small business contractors. Provisions in the proposed regulations allow anyone to submit information to that would improve the methodology for these estimates. DTSC based the collection rates in the proposed regulations on rates that have been demonstrated by other thermostat collection programs and did not receive alternative methods for determining these rates.

DTSC initially proposed reporting requirements for homeowners who deliver out-of-service mercury-added thermostats to the collection program. However, that requirement was removed in response to comments indicating that the reporting requirement for homeowners was too burdensome.

BUSINESS REPORT DETERMINATION

California Code of Regulations, title 22, division 4.5, section 66274.8 of this rulemaking requires that on or before April 1 of each calendar year, a manufacturer or group of manufacturers that operates a program shall submit an annual report to the department that shall include all of the information specified in California Health and Safety Code section 25214.8.13, subsection (i) and all of the additional information of this section for the calendar year covered by the report.

Such information will include:

- (1) A listing of manufacturers represented in the program that historically produced mercury-added thermostats and sold them in California;
- (2) The name, physical address, and contact phone number of each location at which out-of-service mercury-added thermostats were collected; the name, physical address, and contact phone number of each location from which a collection bin or bins were returned; and the date or dates on which the bin or bins were received;
- (3) The total numbers of intact out-of-service mercury-added thermostats returned during the calendar year, specifying the number from each manufacturer, including counts of thermostats produced by historical manufacturers that are no longer in business, a count of out-of-service mercury-added thermostats whose manufacturers cannot be determined, and the total number of loose ampoules received, with the estimated number of thermostats represented by the loose ampoules calculated using a conversion factor of two ampoules per thermostat, or an alternate conversion factor determined by the manufacturer or group of manufacturers with supporting data and calculations;
- (4) The total number of out-of-service mercury-added thermostats collected, determined by adding the number of intact thermostats collected, and the estimated number of thermostats represented by loose ampoules;
- (5) A listing of all participating locations to which the manufacturer or group of manufacturers shipped collection bins that have not been returned within 18 months of shipment;
- (6) A listing of Contractors State Licensing Board Identification Numbers provided by contractors returning thermostats to collection locations;
- (7) A description of any changes to the program from the previous year with an evaluation of the effectiveness in increasing collection rates; and any planned changes to the program to increase collection rates;
- (8) For manufacturers that also implement thermostat collection programs in one or more other states shall provide the name of the state; the number of out-of-service mercury-added thermostats collected in the state during the same calendar year covered by the report; and the number of collection locations for out-of-service mercury-added thermostats in the state, if known.

In accordance with Government Code section 11346.3, subdivision (d), DTSC hereby makes a finding that such reports by businesses are necessary for the health and safety of the people of California

ADVERSE ECONOMIC IMPACT ON SMALL BUSINESS

DTSC has determined that the regulatory action will have no impact on small businesses. Existing law requires thermostat manufacturers to establish a thermostat collection program and pay the costs of transporting and recycling mercury thermostats, thereby relieving small businesses of the burden of managing mercury-containing thermostats as hazardous waste.

SUMMARY AND RESPONSE TO COMMENTS

The attached documents provide the summary and response to comments received for the initial 45-Day Public Notice and Comment Period and the 15-Day Public Notice and Comment Period for Post-Hearing Changes.